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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,473	09/26/2003	Kazuhiko Nagano	Q77631	7410
23373	7590	10/19/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			DOAN, JENNIFER	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

OK

## Office Action Summary

Application No.

10/670,473

Applicant(s)

NAGANO ET AL.

Examiner

Jennifer Doan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-9 is/are rejected.
- 7) ☒ Claim(s) 2 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's communication, filed on July 25, 2005, has been carefully studied by the Examiner. The arguments advanced therein, considered together with the amendment made to the claims, are persuasive. In view of further search, however, a relevant document is found; therefore, a new rejection is set forth below. This action is **not** made final.

#### ***Specification***

1. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Okazaki et al. (U.S. Patent 6,718,088).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With respect to claim 1, Okazaki et al. (figures 1 and 3) disclose a laser apparatus comprising plurality of semiconductor laser elements (LD1-LD7) which emit laser beams, respectively; a multimode optical fiber (30) which has a light-entrance end and a light-emission end; an optical condensing system (20) which collects the laser beams emitted from the plurality of the semiconductor laser elements (LD7), and couples the collected laser beams to the light-entrance end of the multimode optical fiber (30); and a protection member (40) which is arranged at the light-emission end of the multimode optical fiber (30), protects the light-emission end from an atmosphere, and has light-emission window located at least at a predetermined distance from light-emission end (see figure 3).

With respect to claim 6, Okazaki et al. disclose a laser apparatus, wherein the multimode optical fiber has a core diameter of 100 micrometers or smaller at the light emission end (column 15, lines 5-6).

With respect to claim 7, Okazaki et al. disclose a laser apparatus, wherein the plurality of semiconductor laser elements are made of GaN-based compound semiconductor materials (column 7, line 16).

With respect to claim 8, Okazaki et al. (figures 1 and 3) disclose a laser apparatus, wherein the plurality of semiconductor laser elements (LD1-LD7) comprise plural laser diodes mounted to a common heat dissipating substrate (10).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki et al. (as cited above).

With respect to claim 9, Okazaki et al. substantially disclose all the limitations of the claimed invention except a density of light at light-emission window is reduces to less than or equal to approximately 1/1000 of a density of light at the light emission end.

However, the density of light at light-emission window being reduces to less than or equal to approximately 1/1000 of a density of light at the light emission end is considered to be obvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the density of light at light-emission window of Okazaki's device with the value as claimed for the purpose of obtaining the better protection for the optical device and reduce the light loss, and it also has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and it is noted that the applicant does not disclose criticality in the value claimed. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) (see MPEP § 2144.05).

#### ***Allowable Subject Matter***

7. Claims 2 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose or reasonably suggest the laser apparatus, wherein the protection member is made of a transparent material, and comprises a first

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face fixed to the light-emission end of the multimode optical fiber and a second face being located opposite to the first face and realizing the light-emission window as recited in claim 2.

Claim 10 depends from claim 2.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1, 2 and 6-10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Jennifer Doan". The signature is written in a cursive, flowing style.

Jennifer Doan

Patent Examiner

October 13, 2005